

REMARKS

The Official Action mailed April 4, 2005, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on October 31, 2000; July 5, 2001; January 30, 2002; February 5, 2002; November 6, 2002; June 23, 2003; October 24, 2003; December 2, 2003; April 27, 2004; and February 4, 2005. **A further Information Disclosure Statement is submitted herewith and consideration of this Information Disclosure Statement is respectfully requested.**

Claims 1, 3, and 62-100 were pending in the present application prior to the above amendment. Claims 93-100 have been canceled and claims 1, 65, 69, 73, 77, 81, 85, and 89 have been amended to better recite the features of the present invention. Accordingly, claims 1, 3, and 62-92 are now pending in the present application, of which claims 1, 65, 69, 73, 77, 81, 85, and 89 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 5 of the Official Action rejects claims 1, 3, 62-68, 93, and 94 as obvious based on the combination of U.S. Patent No. 5,728,259 to Suzawa; U.S. Patent No. 5,704,986 to Chen; U.S. Patent No. 5,306,651 to Masumo; and U.S. Patent No. 5,661,056 to Takeuchi. Paragraph 6 of the Official Action rejects 69-76, 95, and 96 as obvious based on the combination of Suzawa; U.S. Patent No. 5,147,826 to Liu; and Chen. Paragraph 7 of the Official Action rejects claims 77-84, 97, and 98 as obvious based on the combination of Suzawa; Liu; U.S. Patent No. 5,132,754 to Serikawa; and Chen. Finally, paragraph 8 of the Official Action rejects claims 85-92, 99, and 100 as obvious based on the combination of Suzawa; Serikawa; and Chen.

The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness. As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The Office Action asserts that Suzawa '259 teaches providing said semiconductor film with a metal containing material for promoting crystallization of said semiconductor film in column 4, line 65 to column 5, line 1, crystallizing said semiconductor film by heating in column 5, line 2 and irradiating the crystallized semiconductor film with laser light in column 5, line 3. However, it is respectfully submitted that Suzawa '259 teaches that for accelerated crystallization in this step the silicon film 12 may be incorporated with a trace amount of a metal element which promotes the crystallization of amorphous silicon. Alternatively, crystallization by heat annealing may be followed by irradiation with laser light or similar high intensity light which improves the crystalline properties in column 4, line 65 to column 5, line 4. In other words, Suzawa '259 teaches the heating step and irradiating step for crystallizing


the semiconductor film instead of an accelerated crystallization step using a metal for promoting crystallization of the semiconductor film and fails to disclose or suggest that both should be employed as in the present invention. In this regard, the Examiner's attention is directed to U.S. Patent 5,639,698 to Yamazaki cited in the Information Disclosure Statement filed October 31, 2000 and specifically to Example 16 thereof.

It is respectfully submitted that a *prima facie* case of obviousness cannot be maintained since Suzawa '259 fails to describe or suggest all the claimed limitations as recited in the claims. Further, the cited references such as Chen, Masumo, Takeuchi, Liu and Serikawa also do not cure the deficiencies in Suzawa '259.

Regarding dependent claims 3, 62-64, 66-68, 70-72, 74-76, 78-80, 82-84, 86-88 and 90-92, each of these claims depend from an independent claim that is believed to be allowable for the reasons noted above. Accordingly, these claims are allowable over the cited references for at least the reasons discussed above for the independent claims.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,


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